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WAUKEGAN It's all up to the bugs.
That's what environmental engineers say will obliterate the toxic stew that is the groundwater surrounding the former Outboard Marine Corp. site at Waukegan Harbor.
"We need to finish cleaning the harbor to spur an economic revival of northern Illinois," Kirk said.
U.S. Environmental Protection Agency officials on Monday detailed the latest cleanup efforts at the site off Seahorse Drive, where OMC bankrupted in 2000 dumped millions of gallons of hydraulic fluid used for die-casting engines into the harbor. The fluid contained polychlorinated biphenyls, or PCBs. About 700,000 pounds of PCBs were present in the surrounding soil and 300,000 pounds in harbor sediment.
The EPA supervised a program eliminating 90 percent of the contamination in 1992. A soil cleanup of a coke oven gas plant operated by OMC from the 1970s until 1983 was completed in November 2005.
U.S. Rep. Mark Kirk, R-Highland Park, toured the converted OMC warehouse, where groundwater treatment is expected to begin this summer. The task will take three to eight years to complete and cost \$28 million, money paid by big business including General Motors and North Shore Gas.
"For years, the Outboard Marine Corporation quietly poisoned our community," Kirk said. "For the past eight years, I've made it my priority to work with the EPA to remove this environmental threat. We need to finish cleaning the harbor to spur an economic revival of northern Illinois."

Kirk squatted down to peer inside the tanks, where putrid water the color of strong black coffee will be made clear, but not drinkable, as poisonous particles settle at the bottom to be gobbled.

Eighty percent of contaminants including ammonia, arsenic and phenol will be devoured by bacteria as 36 million gallons of tainted water is sucked from the ground, pumped through a series of huge tanks, then injected back into the earth to let rain and nature purify the rest.

"We'll gradually force-feed the bugs until they really like what they're getting and they grow," said Julie Sullivan, senior environmental engineer with Minneapolis-based Barr Engineering, a primary contractor along with Conestoga-Rovers.

Each tank is held together with 48,000 bolts, according to Kevin Adler, EPA project manager. When one of the tanks was found to leak during a trial run, it was jacked up one-inch and a new bottom was installed.

Outside, in a fenced-off "groundwater remediation zone," 36 cells with 196, six-inch extraction wells and 215 four-inch reinjection wells -- all 30-foot deep -- will operate around the clock, some in the dunes area of the lakefront. Each cell will remain in place for three to four months before being moved to a new spot.

The first-of-its-kind cell pumping system underwent years of testing and modeling, Adler said.

"We spent a lot of time figuring how to pump and treat the toxic stew," he said.

The Illinois Department of Natural Resources and the Department of Fish and Wildlife and other government agencies were called in to consult on protecting habitat of the endangered shorebird piping plover, which stops along the lakefront during migratory flight. Consideration will also be given to the Blandings turtle, listed "threatened" by the state since 1999.

The EPA is also cleaning OMC Plant 2 in preparation of its destruction and redevelopment of

the surrounding land. Groundwater cleanup there could begin as early as 2010.

The OMC site is one of 26 Areas of Concern in the U.S., cited for danger to human health and the environment. Total OMC site cleanup costs are estimated at \$130 million.